CEDARS

COMMON EDUCATION DATA ANALYSIS AND REPORTING SYSTEM

North Carolina Department of Public Instruction

Creating Reports

Basic and Advanced OBIEE Functions

TABLE OF CONTENTS

For more detailed instructions, click the **Help** button [Help] or the **Help Question Mark** button ⑦ on any of the OBIEE web pages.

Revision History

Date	Description	Revised by

For more detailed instructions, click the **Help** button [Help] or the **Help Question Mark** button (?) on any of the OBIEE web pages.

Logging In

The warehouse is accessible only to state and local public education employees. Users must obtain an NCID, register for access to the warehouse, and be granted access by the Security Officer of the system.

State level and PSU Security Officer access requests are granted by the state level Security Officer. All PSUs must have a Security Officer to grant access to users at the local level.

For more information on registering for the CEDARS data warehouse, follow the instructions in the *Registering for the CEDARS Data Warehouse* guide.
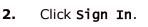
Important: Use the latest Mozilla Firefox browser when logging into the CDW.

Navigation: https://cedars.ncpublicschools.gov/analytics/
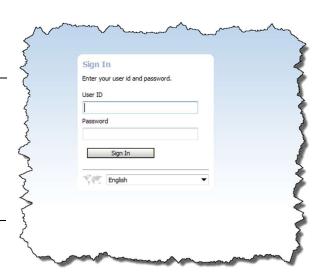
1. Type your NCID username and password into the **User ID** and **Password** fields.

   > **CAUTION:**
   > Passwords are case-sensitive. If unable to log in using NCID, verify the password does not contain either the '**&**' (ampersand) or the '**!**' (exclamation) special characters.

2. Click **Sign In**.

    The OBIEE home page opens.

For more detailed instructions, click the **Help** button [Help] or the **Help Question Mark** button ⑦ on any of the OBIEE web pages.

OBIEE Menu Bar

Use this section to become familiar with the navigation options in the CEDARS Reporting System.

- **Search** – Enables searching the catalog.
- **Advanced** – Displays the Catalog page in search mode.
- **Administration** – State level access only.
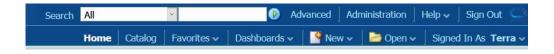- **Help** – Displays the following:
  - **xxx Help** (where *xxx* is the name of the page) – Displays help topics for the current page.
  - **Help Contents** – Displays cascading menus with options that link to the tables of contents for Oracle.
  - **Documentation** - Displays the Oracle BI EE documentation library.
  - **OTN** - Displays the Business Intelligence and Data Warehousing Technology Center page on the OTN.
  - **About Oracle BI EE** — Shows the Oracle BI EE version and copyright information.
- **Sign Out** – signs user out of current session in OBIEE
- **Home** — Displays the Home page.
- **Catalog** - Displays the Catalog page. Provides a list of all saved content to which the user has access.
- **Favorites** - Displays favorite reports and any categories the user created to organize favorites.
- **Dashboards** – Contains links to available dashboard content, consisting of one or more pages of pre-defined content, such as analyses, links to Web sites, and so on.
- **New** – Allows the user to create a new Analysis. Analyses are queries against data that provide answers to business questions. Analyses allow the user to explore and interact with information by visually presenting data in easy-to-understand formats (such as tables and graphs). Interactive Reporting, Published Reporting, and Actionable Intelligence and Marketing are not currently supported by DPI. The users view is specific to their security level.
- **Open** – allows quick access to recently saved analyses.
- **Signed In As** *username* — Displays My Account dialog box. Users can update preferences such as which page opens at login and time zone.
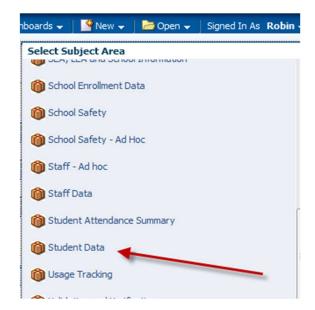
For more detailed instructions, click the **Help** button [Help] or the **Help Question Mark** button [?] on any of the OBIEE web pages.

Basic Report Functions

Creating a New Analysis

3. From the top right of the page, click `New`.
4. Click `Analysis`.

   The `Select Subject Area` menu appears.

5. Click `Student Data`.

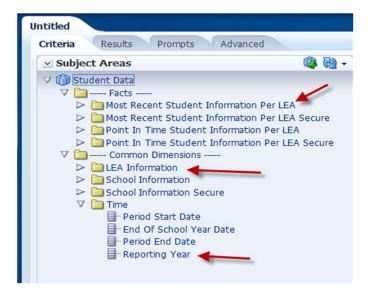## Selecting Data Elements

1. From the left side of the screen in the `Subject Areas` panel, click `Common Dimensions`.
2. Click the `Time` folder. Double click or drag the `Reporting Year` element to the `Selected Columns` workspace.
3. Click the `LEA Information` folder. Double click or drag the `LEA Number` and `LEA Name` elements to the `Selected Columns` workspace.
4. Click the `Facts` folder.
5. Click `Most Recent Student Information`. Double click or drag the `# of Unique Students` and `Grade Level` elements to the `Selected Columns` workspace.
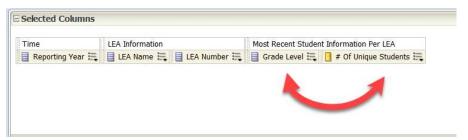
Selecting Data Elements

Note: Arrange columns by selecting a column and moving it to the desired position.
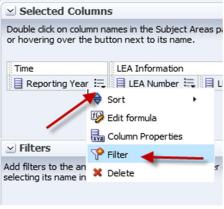
Applying Report Filters

1. From the `Selected Columns` workspace, locate the `Reporting Year` element and hover over the Options (down arrow icon).
Click `Filter`.
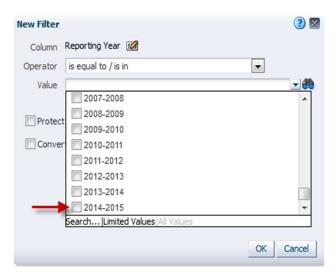
    a. Keep the default `Operator` *is equal to/is in.*

    b. From `Value`, click or type *2014-2015.*

    c. Click `OK`.

For more detailed instructions, click the **Help** button ![Help] or the **Help Question Mark** button ⑦ on any of the OBIEE web pages.

Applying Report Filters

2. Locate the `LEA Number` element and hover over the Options (down arrow icon). Click `Filter`.

    a. Keep the default `Operator` is *equal to/is in*.

    b. From `Value`, click or type *010.*

    Note: LEA and School level users have limited selection. Selection is based on the LEA/School in which they are associated through the OBIEE registration system.
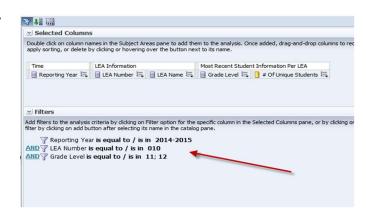
    c. Click `OK`.

3. Locate the `Grade Level Options` element and hover over the Options (down arrow icon). Click `Filter`.

    a. Keep the default `Operator` is *equal to/is in*.

    b. From `Value`, click or type *11* and *12.*

    Important: If typing *11* and *12,* be sure to separate the two numbers with a semi-colon. The results should look like this: `11;12`

4. Click `OK`.

For more detailed instructions, click the **Help** button [Help] or the **Help Question Mark** button ⑦ on any of the OBIEE web pages.
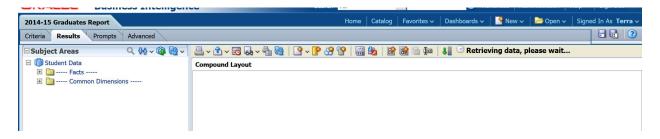
Viewing Results

The Results tab allows users to see the data derived from the elements, filters and formulas created using the Criteria tab.
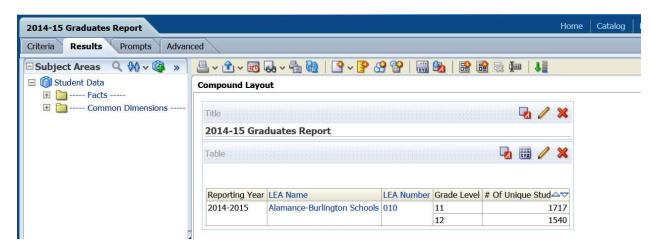
1.   From the top left of the screen, under the new report name, click the `Results` tab.

Results may take a while depending on the size of the query

Completed Results

For more detailed instructions, click the **Help** button [Help] or the **Help Question Mark** button [?] on any of the OBIEE web pages.
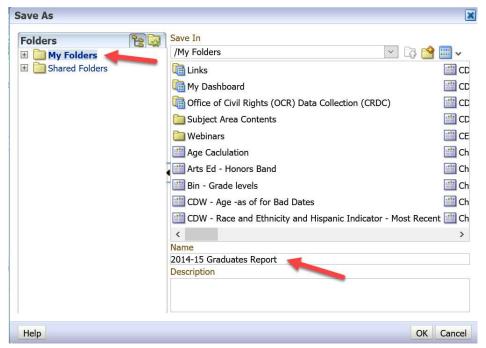
Saving and Downloading Reports

All users have access to their own **My Folders** directory. Users may create subfolders as needed. Some state level uses have access to **Shared Folders**. Shared Folders should only be used as directed by the CEDARS team.

Saving a Report

1. From the top right of the screen, click the **Save** icon. ( )

   The **Save As** dialog box appears.

2. Under **Folders**, click **My Folders**.

3. **Name** the report something meaningful.

   For the purposes of following this document, type **2014-15 Graduates Report**.

   c. Type a meaningful **Description** if applicable.

4. Click **OK**.

   The results are now saved as a report in the My Folders directory.

Copying a Report from the Catalog

The **Catalog** link located at the top of the screen in the menu bar opens a view that allows users to navigate the My Folders and Shared Folders directories. These instructions assume that reports are saved in the **My Folders** folder.

Note: Some state level uses have access to **Shared Folders**. Shared Folders should only be used as directed by the CEDARS team.

1. From the menu bar, click **Catalog**.
2. Navigate to the folder that contains the report.
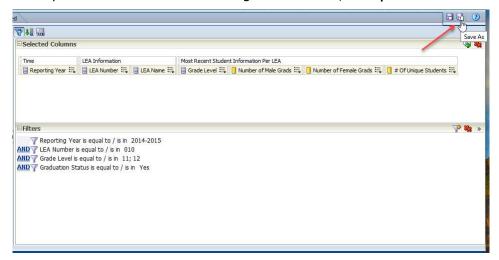
3. Locate the report, click **Edit**.

   The report will open in the **Criteria** tab or the **Results** tab, depending on **Analysis Editor** in the **User Account Settings**.

4. From the top right of the screen, click **Save As** ( )

   Note: Reports can also be saved using the **Results**, **Prompts** and **Advanced** tabs.

5. **Name** the report something meaningful.

   a. Type a meaningful **Description** if applicable.

For more detailed instructions, click the **Help** button ![Help] or the **Help Question Mark** button ![?] on any of the OBIEE web pages.
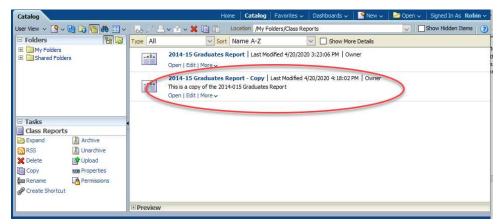
6. Click **OK**.
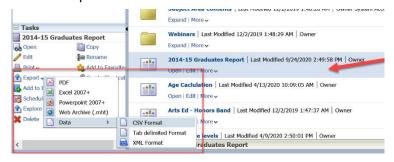
7. From the menu bar, click **Catalog**.

If the report is not visible at the **My Folders** level, navigate to the appropriate folder.

Downloading from a Saved Report in the Catalog

1. From the menu bar, click **Catalog**.
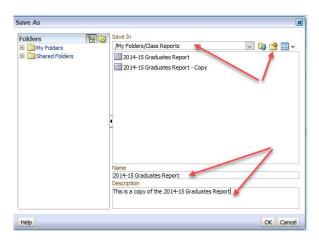
2. Navigate to the folder that contains the report.

3. Locate the report, click once to highlight.

4. From the bottom left in the **Tasks** panel, click **Export**. Reports maybe downloaded in multiple formats.

For more detailed instructions, click the **Help** button [Help] or the **Help Question Mark** button [?] on any of the OBIEE web pages.
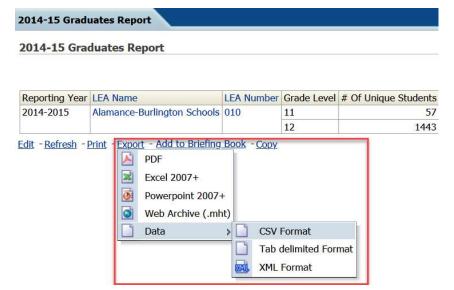
Downloading from an Open Report

5. From the menu bar, click `Catalog`.

6. Navigate to the folder that contains the report.

7. Locate the report, click `Open`.

The report will open a new tab labeled with the report name.

8. At the bottom of the report, click `Export`.

Reports maybe downloaded in multiple formats.

Downloading from the Results tab

The Report must be in Edit form to download data directly from the Results tab.

1. Click the download icon above Compound Layout.

For more detailed instructions, click the **Help** button [Help] or the **Help Question Mark** button [?] on any of the OBIEE web pages.

Adding More Information to a Basic Report

This section assumes the user has created and saved the *2014-2015 Graduates Report* from the Creating a Basic Report section of this document.

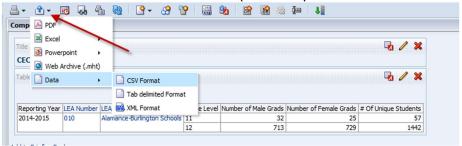## Adding more Columns

1. From left of the screen, in the **Results** tab, click **Facts**.
2. Click **Most Recent Student Information**.
3. Double click or drag the **Graduation Status** to the **Compound Layout** workspace.
4. Click **Save** (🖫).
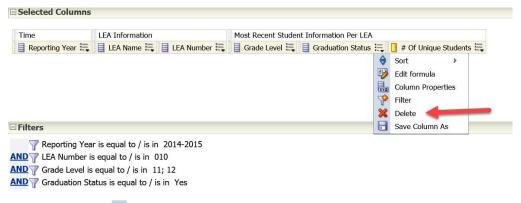
Adding more Filters

Filters can be added to elements that are not required to be visible on a report.

1. From the left of the screen, click the **Criteria** tab.
2. Locate the **Graduation Status** element and hover over the Options (down arrow icon). Click **Filter**.

   a. Keep the default **Operator** is *equal to/is in*.

   b. From **Value**, click or type *Yes.*

3. Click **Save** (🖫).
4. From the left of the screen, click the **Results** tab.

   The **Graduation Status** element has been added to the **Compound Layout**.

5. Remove the **Graduation Status** element from **Selected Columns**.

   a. From the left of the screen, click the **Criteria** tab.

   b. Locate the element and hover over the Options (down arrow icon). Click **Delete**.

6. Click **Save** (🖫).

   The element remains in the **Filters** panel but will no longer be visible on the report.
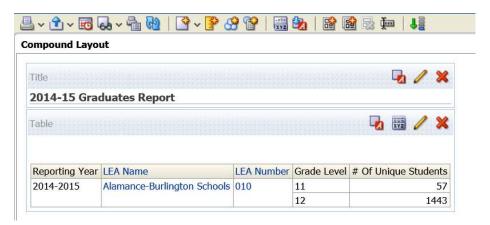
7. Click **Results** to review the report.

For more detailed instructions, click the **Help** button [Help] or the **Help Question Mark** button ⓘ on any of the OBIEE web pages.

The # Of Unique Students now displays only students with a Graduation Status of *Yes*.
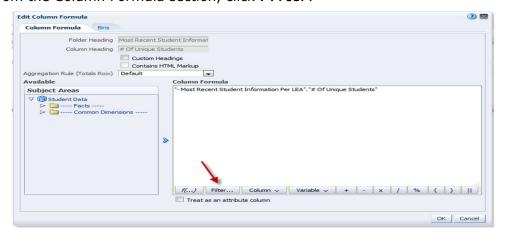
Applying a Filter to a Measure

Count number of males, females and provide an overall of graduated students.

1. Click the `Criteria` tab.
2. Double click or drag the `# Of Unique Students` element the `Compound Layout` workspace.
3. Repeat `step 2`.
4. Location one of the new `# Of Unique Students` elements. Hover over the Options (down arrow icon). Click `Edit Formula`.

   The `Edit Column Formula` dialog box opens.
5. From the Column Formula section, click `Filter`.
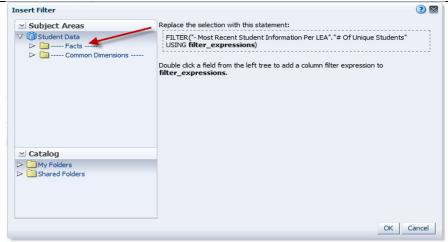
   The `Insert Filter` dialog box opens.
6. From the `Insert Filter` dialog box, click `Facts`.
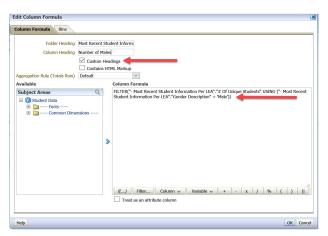
7. Click **Most Recent Student Information**.

8. From **Subject Areas**, double click **Gender Description**.

   A **New Filter** dialog box appears.

   a. Keep the default **Operator** is *equal to/is in*.

   b. From **Value**, click or type *Male.*

   c. Click **OK**.

9. From the **Edit Columns Formula** dialog box, check **Custom Heading**. Type *Number of Males.*

10. Click **OK**.

11. Click **Save** (💾).

12. Click the **Results** tab.

13. Repeat **steps 4 – 12** to add a count for Female students.

Advanced Report Functions

This section assumes the user understands the steps to create a basic report. Steps and images will focus on the advanced functions.

Bin Function

Data binning is the process of grouping individual data values into specific bins or groups according to defined criteria. The examples used in this section are grouping grade levels in categories such as Elementary, Middle and High.

Creating a New Analysis

1. From the top right of the page, click `New`. Click `Analysis`. Click `Student Data`.

2. From `Common Dimensions`:

   a. Click the `Time` folder. Double click or drag the `Reporting Year` element to the `Selected Columns` workspace.

   b. Click the `LEA Information` folder. Double click or drag the `LEA Number` and `LEA Name` elements to the `Selected Columns` workspace.

3. From `Facts`:

   a. Click `Most Recent Student Information` folder. Double click or drag the `# of Unique Students` and `Grade Level` elements to the `Selected Columns` workspace.

4. Create a `Filter` on `Reporting Year` that is equal to/is in *2019-2020*.

5. Create a `Filter` on `LEA Number` that is equal to/is in *010*.

   Note: LEA and School level users have limited selection. Selection is based on the LEA/School in which they are associated through the OBIEE registration system.

6. `Save` the report as *Demonstrate Bins Using Grade Levels.*

Simple Bin

1. From the `Selected Columns` workspace, locate the `Grade Level` element and hover over the Options (down arrow icon). Click `Edit Formula`.

2. From the `Edit Column Formula` dialog box, click the `Bins` tab. Click `Add Bin`.

   A `New Filter` dialog box appears.

For more detailed instructions, click the **Help** button [Help] or the **Help Question Mark** button [?] on any of the OBIEE web pages.

3. Filter by *P0, P1, P2, P3*, and *PK*.

4. Click `OK`.

5. In `Edit Bin Name`, type *PK and Below*. Click `OK`.

A filter has been created in the `Bins` dialog box that now groups all PK grade levels together.

6. Repeat `steps 1-5` to create four more bins:
- *Elem-KG thru Grade 5* (include grades KG, 01, 02, 03, 04, 05)
- *Middle – Grades 6-8* (include grades 06, 07, 08)
- *High – Grades 9 and Above* (include grades 09, 10, 11, 12, 13, GR)
- *Out of School* (include grades OS)

Note: Clicking the `Column Formula` tab displays the `Case` statement generated by the `Bin` functionality
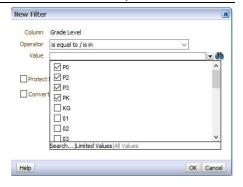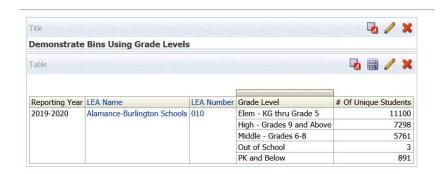
Column Formula

CASE WHEN "- Most Recent Student Information Per LEA"."Grade Level" IN ('P0', 'P1', 'P2', 'P3', 'PK') THEN 'PK and Below' WHEN "- Most Recent Student Information Per LEA"."Grade Level" IN ('KG', '01', '02', '03', '04', '05') THEN 'Elem - KG thru Grade 5' WHEN "- Most Recent Student Information Per LEA"."Grade Level" IN ('06', '07', '08') THEN 'Middle - Grades 6 - 8' WHEN "- Most Recent Student Information Per LEA"."Grade Level" IN ('09', '10', '11', '12', '13', 'GR') THEN 'High - Grades 9 and Above' WHEN "- Most Recent Student Information Per LEA"."Grade Level" = 'OS' THEN 'Out of School' ELSE "- Most Recent Student Information Per LEA"."Grade Level" END

7. Click `Save` (🖫).

8. Click the `Results` tab to view the report.

Demonstrate Bins Using Grade Levels

Reporting Year	LEA Name	LEA Number	Grade Level	# Of Unique Students
2019-2020	Alamance-Burlington Schools	010	Elem - KG thru Grade 5	11100
			High - Grades 9 and Above	7298
			Middle - Grades 6-8	5761
			Out of School	3
			PK and Below	891

For more detailed instructions, click the **Help** button [Help] or the **Help Question Mark** button ⑦ on any of the OBIEE web pages.
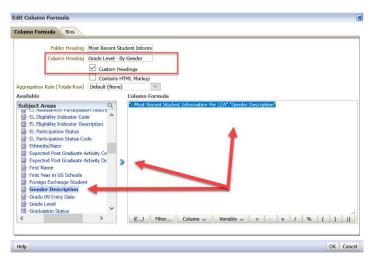
Complex Bin

In this example, expand the **Grade Level** bin grouping to include the grade grouped by gender. To accomplish this the **Case** Statement created by the **Bin** function must be modified. This section demonstrates how to use an existing Bin to create more complex case statements.

1. From the top right of the screen, click **Save As** (⬛).

Name the report *Demonstrate Bins Using Grade Level-By Gender*.

2. Click the **Criteria** tab.

3. Double click or drag a second **Grade Level** element to the **Selected Columns** workspace. Hover over Options (down arrow icon). Click **Edit Formula**.

    a. From the **Edit Column Formula** dialog box under **Subject Areas**, navigate to **Gender Description** (Facts > Most Recent Student Information > Gender Description)

    b. Click **Gender Description**, click the blue chevron (»).

The element in the **Column Formula** workspace has been updated from Grade Level to **Gender Description.** These steps help mitigate spelling errors when the data element name is copied into the Case statement.

    c. Check **Custom Headings**.

    d. In the **Column Heading** field, type *Grade Level-By Gender*.

    e. Click **OK**.

Updating the Case Statement

Syntax is extremely important. It is recommended that a text editor tool is available when performing the next set of steps.

1. From the **Selected Columns** workspace, locate the **Grade Level** element. Hover over Options (down arrow icon). Click **Edit Formula**.

    a. Copy the **Case** statement form the **Column Formula** workspace.

    b. Paste the Case statement to a editor, like **Notepad**.

    c. Line up the When clauses so that they are left justified and easier to read and edit.

For more detailed instructions, click the **Help** button [Help] or the **Help Question Mark** button (?) on any of the OBIEE web pages.

Line up the When clauses so they are easier to read

```
CASE
WHEN "- Most Recent Student Information Per LEA"."Grade Level" IN ('P0', 'P2', 'P3', 'PK', 'P1')
THEN 'PK and Below'

WHEN "- Most Recent Student Information Per LEA"."Grade Level" IN ('KG', '01', '02', '03', '04', '05')
THEN 'Elem - KG thru Grade 5'

WHEN "- Most Recent Student Information Per LEA"."Grade Level" IN ('06', '07', '08')
THEN 'Middle - Grades 6-8'

WHEN "- Most Recent Student Information Per LEA"."Grade Level" IN ('09', '10', '11', '12', '13', 'GR')
THEN 'High - Grades 9 and Above'

WHEN "- Most Recent Student Information Per LEA"."Grade Level" = 'OS'
THEN 'Out of School'

ELSE "- Most Recent Student Information Per LEA"."Grade Level"

END
```

> WHEN is the condition.
> THEN is the element grouping name.

2. In OBIEE, click **Cancel**.

3. Edit the **Grade Level-By Gender** element. Highlight and copy the entire contents of **the Column Formula** workspace.

4. Navigate back to the editor tool.

    To group the grade levels by gender, the **Gender Description** element must be added to each **When** clause in the **Case** statement.

    Because there are two gender descriptions, **Male** and **Female**, there must be two **When** clauses for each grade grouping.

    a. Duplicate each **When** clause.

    b. Add to each When clause, the new condition of the **Gender Description** and update the gender condition with:

    - ='Male'
    - ='Female'

    Important: "-Most Recent Student Information Per LEA"."Gender Description" must be preceded by the word **and**

    c. Update the element grouping name of each of the **When** clause.

5. Copy the new **Case** statement from the text editor into the **Column Formula** workspace of the new **Grade Level - by Gender** element.

    The new Case statement should completely replace what was there previously.

6. Click **OK**.

    If there are syntax errors in the Case statement, OBIEE will not allow the update to be saved. Review the Case statement. If errors persist, try running small parts of the new Case statement to troubleshoot.
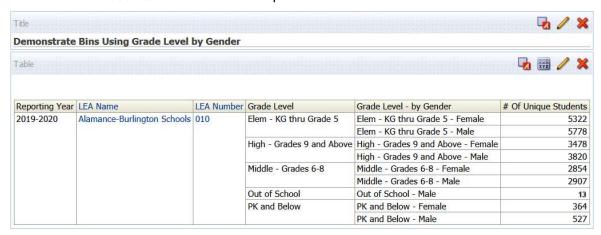
Duplicate each Condition, Add the 'AND' Condition, Update the Element Grouping Name

```
CASE
WHEN "- Most Recent Student Information Per LEA"."Grade Level" IN ('P0', 'P2', 'P3', 'PK', 'P1')
AND "-Most Recent Student Information Per LEA"."Gender Description" = 'Male'
THEN 'PK and Below - Male'

WHEN "- Most Recent Student Information Per LEA"."Grade Level" IN ('P0', 'P2', 'P3', 'PK', 'P1')
AND "-Most Recent Student Information Per LEA"."Gender Description" = 'Female'
THEN 'PK and Below - Female'

WHEN "- Most Recent Student Information Per LEA"."Grade Level" IN ('KG', '01', '02', '03', '04', '05')
AND "-Most Recent Student Information Per LEA"."Gender Description" = 'Male'
THEN 'Elem - KG thru Grade 5 - Male'

WHEN "- Most Recent Student Information Per LEA"."Grade Level" IN ('KG', '01', '02', '03', '04', '05')
AND "-Most Recent Student Information Per LEA"."Gender Description" = 'Female'
THEN 'Elem - KG thru Grade 5 - Female'

WHEN "- Most Recent Student Information Per LEA"."Grade Level" IN ('06', '07', '08')
AND "-Most Recent Student Information Per LEA"."Gender Description" = 'Male'
THEN 'Middle - Grades 6-8 - Male'

WHEN "- Most Recent Student Information Per LEA"."Grade Level" IN ('06', '07', '08')
AND "-Most Recent Student Information Per LEA"."Gender Description" = 'Female'
THEN 'Middle - Grades 6-8 - Female'

WHEN "- Most Recent Student Information Per LEA"."Grade Level" IN ('09', '10', '11', '12', '13', 'GR')
AND "-Most Recent Student Information Per LEA"."Gender Description" = 'Male'
THEN 'High - Grades 9 and Above - Male'

WHEN "- Most Recent Student Information Per LEA"."Grade Level" IN ('09', '10', '11', '12', '13', 'GR')
AND "-Most Recent Student Information Per LEA"."Gender Description" = 'Female'
THEN 'High - Grades 9 and Above - Female'

WHEN "- Most Recent Student Information Per LEA"."Grade Level" = 'OS'
AND "-Most Recent Student Information Per LEA"."Gender Description" = 'Male'
THEN 'Out of School - Male'

WHEN "- Most Recent Student Information Per LEA"."Grade Level" = 'OS'
AND "-Most Recent Student Information Per LEA"."Gender Description" = 'Female'
THEN 'Out of School - Female'

ELSE "- Most Recent Student Information Per LEA"."Grade Level"

END
```

> WHEN is the condition.
> AND is the update to the condition
> THEN is the element grouping name.

7. Click the **Results** tab to run the report.

Title

Demonstrate Bins Using Grade Level by Gender

Table

Reporting Year	LEA Name	LEA Number	Grade Level	Grade Level - by Gender	# Of Unique Students
2019-2020	Alamance-Burlington Schools	010	Elem - KG thru Grade 5	Elem - KG thru Grade 5 - Female	5322
				Elem - KG thru Grade 5 - Male	5778
			High - Grades 9 and Above	High - Grades 9 and Above - Female	3478
				High - Grades 9 and Above - Male	3820
			Middle - Grades 6-8	Middle - Grades 6-8 - Female	2854
				Middle - Grades 6-8 - Male	2907
			Out of School	Out of School - Male	13
			PK and Below	PK and Below - Female	364
				PK and Below - Male	527

8. Adjust columns as appropriate.

9. Click **Save** (🖫).

For more detailed instructions, click the **Help** button [Help] or the **Help Question Mark** button ⑦ on any of the OBIEE web pages.

Contact Function and Concatenate Operator

This section uses the **SEA, LEA and School Information** Subject Area to demonstrate two ways of merging data elements together.
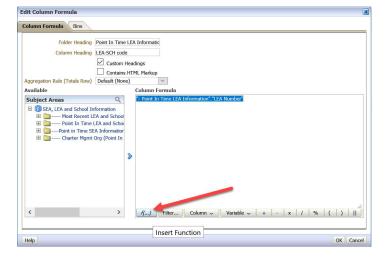
In previous examples, the '**Most Recent**' folders were used. '**Most Recent**' data elements are cumulative, and the data may be filtered by **Reporting Year**. In this example, we will be using '**Point In Time**' data which is may be filtered on a **Snapshot Date**.

Creating a New Analysis

1. From the **Menu** bar, click **New**. Click **Analysis**. Select the **SEA, LEA and School Information** Subject Area.
2. From Point in **Time LEA Information**, double click or drag the **Snapshot Date**, **LEA Number** and **LEA Name** elements to the **Selected Columns** workspace.
3. From **Point in Time School Information**, double click or drag the **School Number**, **School Name** elements to **Selected Columns** workspace.
4. Filter the **Snapshot Date:** *is equal to/is in 6/30/2020*
5. Filter the **School Number:** *is not equal to / is not in 292;293;294;295;297*

    These school numbers reflect program schools and should not be included in this report.

6. Click **Save** (🖫). Name the report: *Demonstrate Concatenate*

Example 1. Concat Function

1. Double click or drag a second **LEA Number** element to the **Selected Columns** workspace. Hover over Options (down arrow icon). Click **Edit Formula**.
2. Check **Custom Headings**, in the **Column Heading** field, type *LEA-SCH Code*.
3. From the **Column Formula** workspace, verify the entire content is highlighted.
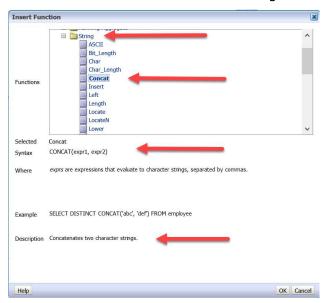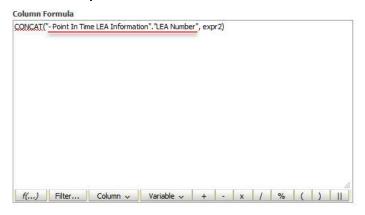4. Below the **Column Formula** workspace, click the **Insert Function** button *f(...)*

For more detailed instructions, click the **Help** button [Help] or the **Help Question Mark** button ⑦ on any of the OBIEE web pages.

5. Click `String`, click `Concat`.

OBIEE displays information about the function when it is selected. For Concat, the following information is displayed:

- `Syntax`: CONCAT(expr1, expr2)
- `Where` (describes function expressions): exprs are expressions that evaluate to character strings, separated by commas.
- `Example`: SELECT DISTINCT CONCAT('abc', 'def') FROM employee
- `Description`: Concatenates two character strings

6. Click `OK`. The `LEA Number` is `expr1` in the `CONCAT` function. The full name of the `School Number` will be `expr2`.
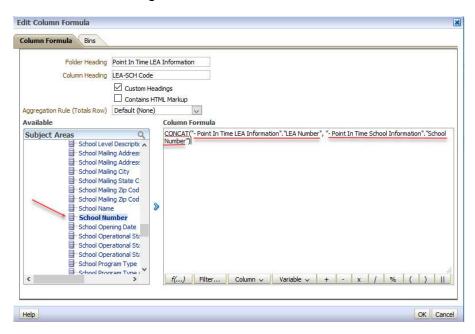
7. Highlight *expr2*.

8. From the `Edit Column Formula` dialog box under `Subject Areas`, navigate to `School Number`. (Point In Time LEA and School Information > Point In Time School Information > School Number)

9. Click **School Number**, click the blue chevron (⟫).

The resulting CONCAT function should look like this.

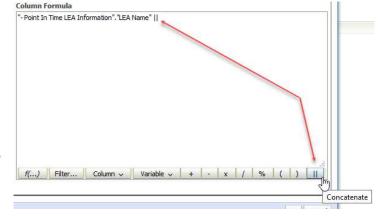**10.** Click **OK**. Click the **Results** tab to view the report. Click **Save** (🖫).

Example 2. Concatenate Operator (||)

1. From the **Criteria** tab, double click or drag a third **LEA Name** element to the **Selected Columns** workspace. Hover over Options (down arrow icon). Click **Edit Formula**.

2. Check **Custom Headings**.

3. In the **Column Heading** field, type *LEA-SCH Name*.

4. From the **Column Formula** workspace, place the cursor to the right of the **LEA Name**.

5. Click on the dual vertical bars symbol at the bottom of the **Column Formula** work area. The symbol is placed at the position of the cursor.
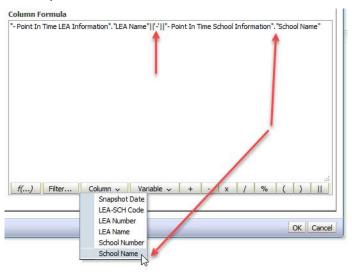
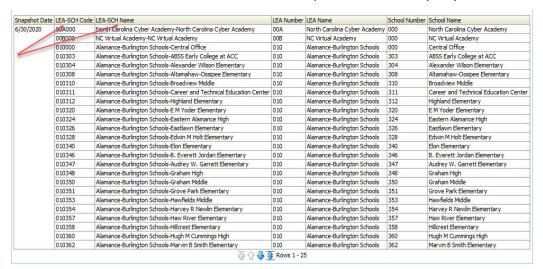*Note:* Hovering over the symbol displays the word **Concatenate**.

6. Place the cursor to the right of the `Concatenate` symbol and add a hyphen `('-')`. The single quotation marks must be included.

7. Add a second `Concatenate` symbol after the hyphen. Verify the cursor is positioned after the last Concatenate symbol.

8. Click the `Column` dropdown. Click `School Name`.

Column Formula

`"- Point In Time LEA Information"."LEA Name"||'-'||"- Point In Time School Information"."School Name"`

| f(...) | Filter... | Column ∨ | Variable ∨ | + | - | x | / | % | (|) | || |

Snapshot Date
LEA-SCH Code
LEA Number
LEA Name
School Number
School Name

OK   Cancel

9. Click `OK`. Click the `Results` tab to view the report. Click `Save` ( ).

Snapshot Date	LEA-SCH Code	LEA-SCH Name	LEA Number	LEA Name	School Number	School Name
6/30/2020	00A000	North Carolina Cyber Academy-North Carolina Cyber Academy	00A	North Carolina Cyber Academy	000	North Carolina Cyber Academy
	00B000	NC Virtual Academy-NC Virtual Academy	00B	NC Virtual Academy	000	NC Virtual Academy
	010000	Alamance-Burlington Schools-Central Office	010	Alamance-Burlington Schools	000	Central Office
	010303	Alamance-Burlington Schools-ABSS Early College at ACC	010	Alamance-Burlington Schools	303	ABSS Early College at ACC
	010304	Alamance-Burlington Schools-Alexander Wilson Elementary	010	Alamance-Burlington Schools	304	Alexander Wilson Elementary
	010308	Alamance-Burlington Schools-Altamahaw-Ossipee Elementary	010	Alamance-Burlington Schools	308	Altamahaw-Ossipee Elementary
	010310	Alamance-Burlington Schools-Broadview Middle	010	Alamance-Burlington Schools	310	Broadview Middle
	010311	Alamance-Burlington Schools-Career and Technical Education Center	010	Alamance-Burlington Schools	311	Career and Technical Education Center
	010312	Alamance-Burlington Schools-Highland Elementary	010	Alamance-Burlington Schools	312	Highland Elementary
	010320	Alamance-Burlington Schools-E M Yoder Elementary	010	Alamance-Burlington Schools	320	E M Yoder Elementary
	010324	Alamance-Burlington Schools-Eastern Alamance High	010	Alamance-Burlington Schools	324	Eastern Alamance High
	010326	Alamance-Burlington Schools-Eastlawn Elementary	010	Alamance-Burlington Schools	326	Eastlawn Elementary
	010328	Alamance-Burlington Schools-Edwin M Holt Elementary	010	Alamance-Burlington Schools	328	Edwin M Holt Elementary
	010340	Alamance-Burlington Schools-Elon Elementary	010	Alamance-Burlington Schools	340	Elon Elementary
	010346	Alamance-Burlington Schools-B. Everett Jordan Elementary	010	Alamance-Burlington Schools	346	B. Everett Jordan Elementary
	010347	Alamance-Burlington Schools-Audrey W. Garrett Elementary	010	Alamance-Burlington Schools	347	Audrey W. Garrett Elementary
	010348	Alamance-Burlington Schools-Graham High	010	Alamance-Burlington Schools	348	Graham High
	010350	Alamance-Burlington Schools-Graham Middle	010	Alamance-Burlington Schools	350	Graham Middle
	010351	Alamance-Burlington Schools-Grove Park Elementary	010	Alamance-Burlington Schools	351	Grove Park Elementary
	010353	Alamance-Burlington Schools-Hawfields Middle	010	Alamance-Burlington Schools	353	Hawfields Middle
	010354	Alamance-Burlington Schools-Harvey R Newlin Elementary	010	Alamance-Burlington Schools	354	Harvey R Newlin Elementary
	010357	Alamance-Burlington Schools-Haw River Elementary	010	Alamance-Burlington Schools	357	Haw River Elementary
	010358	Alamance-Burlington Schools-Hillcrest Elementary	010	Alamance-Burlington Schools	358	Hillcrest Elementary
	010360	Alamance-Burlington Schools-Hugh M Cummings High	010	Alamance-Burlington Schools	360	Hugh M Cummings High
	010362	Alamance-Burlington Schools-Marvin B Smith Elementary	010	Alamance-Burlington Schools	362	Marvin B Smith Elementary

Rows 1 - 25

For more detailed instructions, click the **Help** button [Help] or the **Help Question Mark** button [?] on any of the OBIEE web pages.

Date Functions

Creating a New Analysis

1. From the **Menu** bar, click **New**. Click **Analysis**. Select the **Student Data** Subject Area.

2. From **Common Dimensions**, select the following elements:
   - Time > **Reporting Year**
   - LEA Information > **LEA Number**

3. From **Facts >** Most Recent Student Information Per LEA, select the following elements:
   - **Grade Level**
   - **# of Unique Number of Students**
   - **Date of Birth**
   - **Date of Birth**

   The **Date of Birth** element must be added to the **Selected Columns** workspace twice. The first element will be used to calculate age as of the current date. The second element will be used to calculate age as of a specific date.

4. Filter the **Reporting Year** *is equal to/is in 2019-2020.*

5. Filter the **LEA Number** *is equal to/is in 920*

6. **Save** the report as *Demonstrate Date Functions.*

Calculating Age as of the Current Date

1. Locate the first **Date of Birth** element and **Edit Formula**.

2. Update the **Column Heading** to *Age – As of Current Date*.

3. From the **Column Formula** workspace, verify the entire content is highlighted.

   a. Click the **Insert Function** button *f(…)*.

   b. Click **Calendar/Date**

   c. Click **TimestampDiff**.

   The **Insert Function** dialog box appears.

   The TimestampDiff function compares two dates and has three inputs: *interval, expr, and timestamp2*.

   Interval describes the result of the date comparison. For example, the difference can be counted in seconds, minutes, hours, days, weeks, months, quarters, or years.

   Expr and **timestamp2** are the two dates that are to be compared.
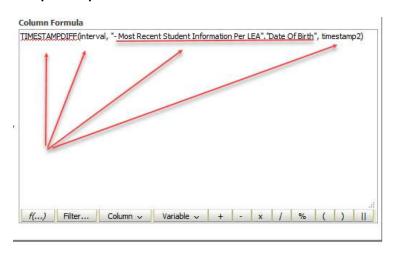
OBIEE displays the following information for the `TimestampDiff` function:

- **Syntax**: TIMESTAMPDIFF(interval, expr, timestamp2)
- **Where**: interval is the specified interval. Valid values are SQL_TSI_SECOND, SQL_TSI_MINUTE, SQL_TSI_HOUR, SQL_TSI_DAY, SQL_TSI_WEEK, SQL_TSI_MONTH, SQL_TSI_QUARTER, SQL_TSI_YEAR.
- **Example**: SELECT TIMESTAMPDIFF(SQL_TSI_DAY, TIMESTAMP'1998-07-31 23:35:00',TIMESTAMP'2000-04-01 14:24:00') FROM Employee WHERE employeeid = 2;
- **Description**: Returns the total number of specified intervals between two timestamps.

d. Click **OK**.

Notice 'expr' is replaced with the full name of the Date of Birth element

4. From the `Column Formula` workspace, highlight `interval`. Type *SQL_TSI_YEAR.*

5. Highlight `timestamp2`. Type *current_date.*

The result of the `TIMESTAMPDIFF` function will be the different between ***Date of Birth*** and current date in years, as years is the interval.

6. Click **OK**. Click **Save**. ( ). Click the **Results** tab to view the report.

Calculating Age as of a Specific Date

1. Return to the `Criteria` tab.

2. Locate the second `Date of Birth` element and `Edit Formula`.

3. Update the `Column Heading` to *Age – As of 7/1/2019*.

4. Navigate to the `TimestampDiff` function, click **OK**.

Insert Function button f(…) > Calendar/Date > `TimestampDiff`

5. Highlight `interval`, type *SQL_TSI_YEAR*.

6. Highlight `timestamp2`, type the 'as of' date:
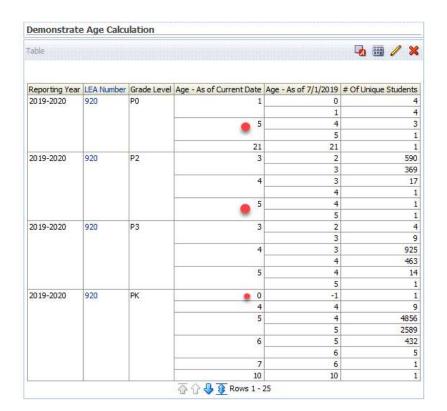
> `Timestamp'2019-07-01 00:00:00'`

Note: Pay attention to the single quote around the date (*'2019-07-01 00:00:00'*).

7. Click `Save` (🖫). Click the `Results` tab to view the report.

Compare the `Grade Level` column to either or both age columns. `Grade Level P0` is for children below 1 year of age. This report shows there are 4 children ages 4-5 in `Grade Level P0`. Possibly, the `Grade Level` or `Date of Birth` was not recorded correctly in PowerSchool. This is a way to review the student data; making sure grade levels and birth dates entered in PS are correct.

Note: Data displayed are from the OBIEE test instance and are not representative of actual student counts

Demonstrate Age Calculation

Table

Reporting Year	LEA Number	Grade Level	Age - As of Current Date	Age - As of 7/1/2019	# Of Unique Students
2019-2020	920	P0	1	0	4
				1	4
			5	4	3
				5	1
			21	21	1
2019-2020	920	P2	3	2	590
				3	369
			4	3	17
				4	1
			5	4	1
				5	1
2019-2020	920	P3	3	2	4
				3	9
			4	3	925
				4	463
			5	4	14
				5	1
2019-2020	920	PK	0	-1	1
			4	4	9
			5	4	4856
				5	2589
			6	5	432
				6	5
			7	6	1
			10	10	1

Rows 1 - 25

For more detailed instructions, click the **Help** button [Help] or the **Help Question Mark** button ⑦ on any of the OBIEE web pages.

Math Operators

The following steps build upon the *2014-15 Graduates Report* created in the **Basic Report Functions** section of this document. This section demonstrates how to create the percentages of graduates by gender.

Updating the 2014-15 Graduates Report

1. From the menu bar, click `Catalog`.
2. Navigate to the folder that contains the report, *2014-15 Graduates Report.* Click `Edit`.

    The report opens in the `Criteria` tab. The `Student Data` subject area appears to the left.

3. From the `Selected Columns` workspace, use `Edit Formula` to update the column headers of the following elements:
    *   `# of Unique Students` = *Total Grads*
    *   `Number of Males` = *Number of Male Grads*
    *   `Number of Females` = *Number of Female Grads*
4. From `Most Recent Student Information Per LEA` folder, add the `# Of Unique Students` element twice.

    (Facts > Most Recent Student Information > # Of Unique Students)

    a. Use `Edit Formula` to update the column headers:
        o   *Percentage – Males*
        o   *Percentage - Females*

5. Click `Save` (💾).

Calculating Percentages

The newly added elements must be filtered by gender and then divided by the *Total Grads* element. This section demonstrates how to use pre-existing filters created in the *Applying a Filter to a Measure* section of this document to create the percentage.
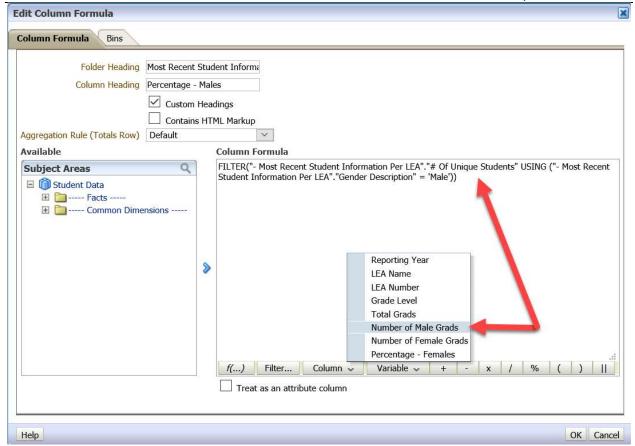
1. Locate the `Percentage – Males` element. Using the `Edit Formula`, highlight and delete the contents of the `Column Formula` workspace.
2. Click the `Column` dropdown, click `Number of Male Grads`.

    The Column Formula workspace now contains the filter created for the Number of Male Grads element.
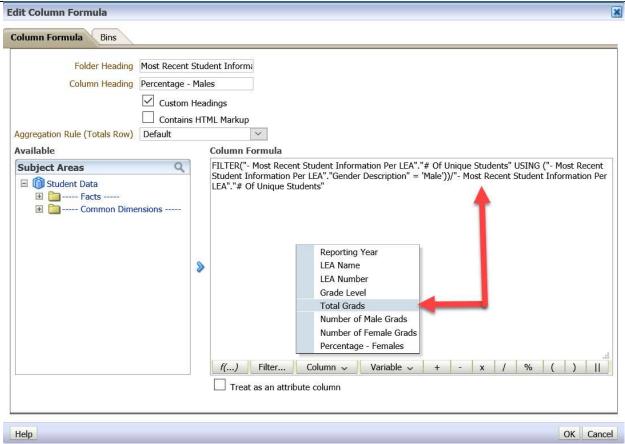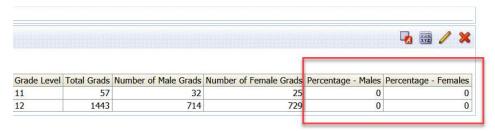
3. From the `Column Formula` workspace, place the cursor to the right of the right-most parenthesis. Click the `division operator (/)` from the operators at the bottom of the `Column Formula` work area.

4. Place the cursor to the right of the `division operator (/).` Click the `Column` dropdown, click `Number of Male Grads`.

For more detailed instructions, click the **Help** button [Help] or the **Help Question Mark** button [?] on any of the OBIEE web pages.

5. Click **OK**.

6. Repeat **steps 1–3** to update the **Percentage – Females** element with the **Number of Female Grads** filter.

7. Click **Save** (🖫). Click the **Results** tab to view the report.

   The **Percentage – Male** and **Percentage – Female** display 0.

By default, the report displays the results as integers. The actual result is less than zero, therefore zero is displayed. The results must be Edited and the Column Properties updated to display a decimal or a percentage.

Adding a Multiplier and Applying Decimals and Percentages

The multiplier of **1.0*** must be added to each percentage column. There is flexibility where the multiplier is placed. This section provides two examples.

In the *Percentage – Male* formula, the multiplier is placed inside the clause that sums the total number of students, making that result a decimal.

In the *Percentage – Female* formula, the multiplier is placed inside the clause that sums the total number of female students, making that result a decimal.

Both examples yield the same result in that the result is a decimal, not an integer. The actual percentages will be different.
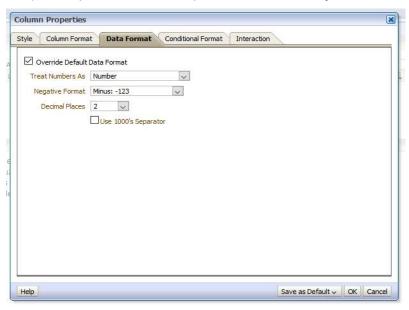
Note: Like all complex mathematical formulas, placement of the parenthesis is very important in producing correct results.

Example 1

1. For the `Percentage – Male` column, `Edit Formula`, update the contents of the `Column Formula` workspace:

   FILTER("- Most Recent Student Information Per LEA"."# Of Unique Students" USING ("- Most Recent Student Information Per LEA"."Gender Code" = 'M')) / (1.0 * "- Most Recent Student Information Per LEA"."# Of Unique Students")

2. Click `OK`.
3. Hover over Options (down arrow icon). Click `Column Properties`.

4. Click the `Data Format` tab.
   a. Check `Override Default Data Format`.
   b. From `Treat Numbers,` select `Number`.

    c. From `Decimal Places,` select `2`

       The result will be displayed with 2 decimal places.
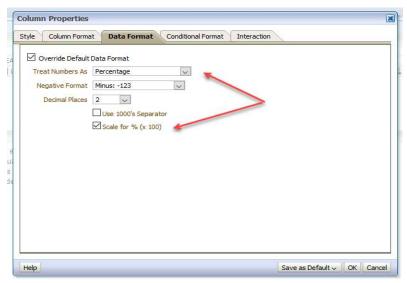
    d. Click `OK.`

Example 2

1. For the `Percentage – Female` column, `Edit Formula`, update the contents of the `Column Formula` workspace:

(1.0 * FILTER("- Most Recent Student Information Per LEA"."# Of Unique Students" USING ("- Most Recent Student Information Per LEA"."Gender Code" = 'F'))) / "- Most Recent Student Information Per LEA"."# Of Unique Students"

2. Click `OK`.

3. Hover over Options (down arrow icon). Click `Column Properties`.

4. Click the `Data Format` tab.

    a. Check `Override Default Data Format`.

    b. From `Treat Numbers,` select `Percentage`.

    c. From `Decimal Places,` select `2.`

    d. Check `Scale for % (x 100)`.

    e. Click `OK.`

5. Click **Save**. (🖫). Click the **Results** tab to view the report.

Number of Male Grads	Percentage - Males	Number of Female Grads	Percentage - Females	Total Grads
67	0.35	126	65.28%	193
829	0.52	770	48.16%	1599
141	0.45	169	54.52%	310
53	0.46	63	54.31%	116
132	0.57	100	43.10%	232
95	0.44	122	56.22%	217
69	0.46	80	53.69%	149
239	0.50	235	49.58%	474
86	0.51	83	49.11%	169
176	0.49	181	50.70%	357
456	0.51	435	48.82%	891
920	0.52	852	48.08%	1772
150	0.47	169	52.98%	319
483	0.51	458	48.67%	941

More About Column Properties

The **Column Properties** dialog box provides for additional formatting that can be applied to the columns in a report to achieve specific results. Additional formats can be used to highlight blocks of related information and call attention to specific data elements. The **Column Properties** dialog provides the following formatting.

- **Style Tab**: Provides ability to edit properties of the font, cell and borders for a column in the report. Specify how each cell and its contents should be displayed in the report. For example, change the cell border to red and the cell content to be displayed in a 14-point Arial font.
- **Column Format Tab**: Provides ability to edit headings and change the Value Suppression setting. The default suppression setting is to suppress repeating values for a column. Change the setting to Repeat to see the how the report display is changed.
- **Data Format Tab**: Provides ability to edit the format of numeric fields, including the ability to specify the number of decimal places. Specify how to override the data's default display characteristics. The options that display on this tab depend upon the data type (text, date and time zone, or numeric) of the column.
- **Conditional Format Tab**: Provides the ability to set a condition on a cell and to specify how the cell should be displayed when the condition is met. The condition feature works like a filter. Setting the style of the cell when the condition is met works like the that described on the **Style** tab.
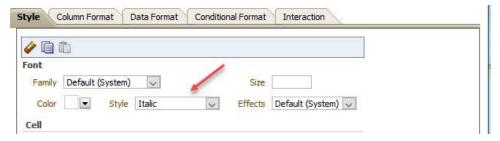
This sample report includes a variety of Column Property settings

LEA Name	Number of Male Grads	Percentage - Males	Number of Female Grads	Percentage - Females	Total Grads
North Carolina Cyber Academy	67	0.35	126	65.28%	193
Alamance-Burlington Schools	829	0.52	770	48.16%	1599
Alexander County Schools	141	0.45	169	54.52%	310
Alleghany County Schools	53	0.46	63	54.31%	116
Anson County Schools	132	0.57	100	43.10%	232
Ashe County Schools	95	0.44	122	56.22%	217
Avery County Schools	69	0.46	80	53.69%	149
Beaufort County Schools	239	0.50	235	49.58%	474
Bertie County Schools	86	0.51	83	49.11%	169
Bladen County Schools	176	0.49	181	50.70%	357
Brunswick County Schools	456	0.51	435	48.82%	891
Buncombe County Schools	920	0.52	852	48.08%	1772
Asheville City Schools	150	0.47	169	52.98%	319
Burke County Schools	483	0.51	458	48.67%	941

- **LEA Name** is set to italics, using the **Style** tab
- **Number of Male Grads** is set to green, using the **Style** tab
- **Number of Female Grads** is set to blue, using the **Style** tab
- The **Percentage – Males** value set to red when below **40%,** using the **Conditional Format** tab
- The **Percentage – Females** value set to pink when above **60%,** using the **Conditional Format** tab

Applying Formatting
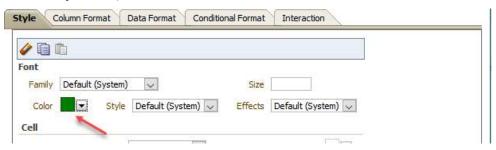
- Setting the Font to *Italics*:

From the **Style** tab, select **Italic** from the **Style** dropdown.
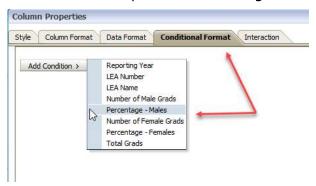
- Setting the Font **Color**:
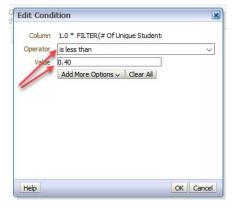
  From the **Style** tab, select a **Color**.

- Setting a condition for a value in a cell:

  a. From the **Conditional Format** tab, click **Add Condition**, double click the appropriate column. This example uses **Percentage – Males**.
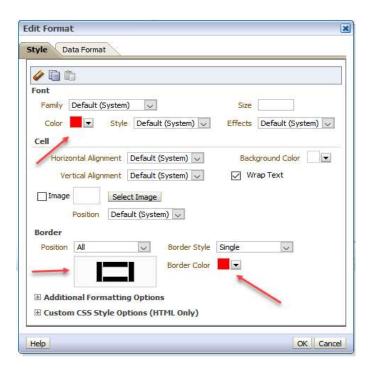
  b. The **Edit Condition** dialog appears. Using the **Operator** dropdown, set a filter (or condition). In this example, set the condition to trigger a change to the cell when the cell value is less than *0.40*. Click **OK**.
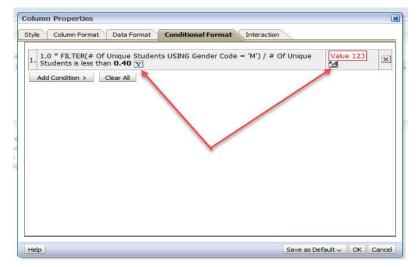
c. The **Edit Format** dialog appears. In this example, the font `Color` is set to red and the cell `Border Color` is set to red. Click `Ok`.

Similar `Colum Properties` were applied to the `Percentage – Females` column, using different conditional formatting.

d. To modify a filter condition or cell style on a column after it has been saved:

- Click the `Filter` button (⧨) on the condition to be modified. The `Edit Condition` dialog box will be displayed.
- Click the `Edit Format` button (▨) to open the `Edit Format` dialog. The `Style` tab on the `Edit Format` dialog box is displayed.

More About Filtering
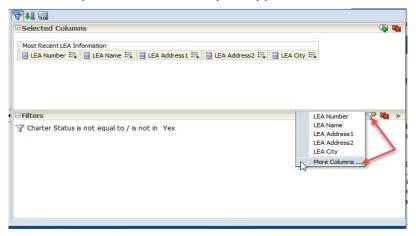
There are several ways to apply filters to a report. There is the method presented in the **Basic Report** example where a filter is applied to an element included in a report. Filters can be applied to an element that is not included in the `Selected Columns` workspace of the **Criteria** tab. Filters can also be based on the results an element in another report.

Adding a Filter to an Element Not Included in Selected Columns Workspace

Filters can be added to elements that will not display in the final report. This example demonstrates excluding Charter Schools from a LEA address list.

1. Create a simple LEA address report from the `SEA, LEA and School Information Subject Area`.

    a. Add the following elements from the `Most Recent LEA and School Information` subfolder:
    *   `LEA Number`
    *   `LEA Name`
    *   `LEA Address1`
    *   `LEA Address2`
    *   `LEA City`

    b. Save the report as *Demonstrating More Filters – LEA Address List*

2. From the `Filters` workspace below the Selected Columns workspace, click the `Filter` icon (🔽).

    The elements already selected for the report appear.

3. Click `More Columns`.

    The Select Column dialog box appears. The SEA, LEA and School Information Subject Area is displayed.

For more detailed instructions, click the **Help** button ⬚Help⬚ or the **Help Question Mark** button ⓘ on any of the OBIEE web pages.

4. Navigate to and click `Charter Status`.
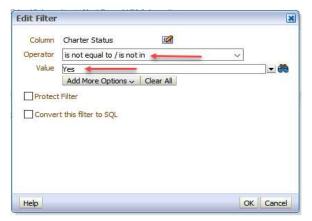
(Most Recent LEA and School Information > Most Recent LEA Information)

The `Edit Filter` dialog box appears.

5. Update the Filter `Operator` to `is not equal / is not in`.

6. Update the `Value` to `Yes`.

Note: If a value appears more than once within the drop-down, check each iteration.

7. Click `OK`. Click `Save`. ( ). Click the `Results` tab to view the report.

For more detailed instructions, click the **Help** button [Help] or the **Help Question Mark** button [?] on any of the OBIEE web pages.

Adding a Filter from a Saved Report
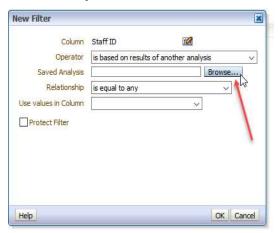
This example demonstrates how to use a filter based on the results of a saved report from the Staff Data Subject Area. The final report will count the number of staff from the school year 2017-18 who will be returning for school year 2018-19.

There are three main steps to completing this example:
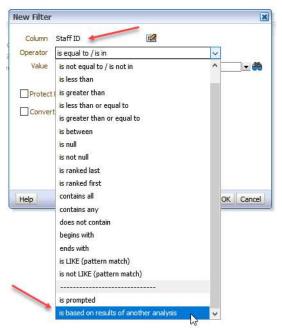
a. Create a report that counts the number of staff in *Central Office* at a particular LEA,

b. Copy the report in Step A. and add the *Staff ID* to the report, and

c. Create a 3rd report that is filtered by the *Staff IDs* from Step B.

1. Create a report from the **Staff Data Subject Area**: using the subfolders:

    a. Add the following elements:
    - From **Dimensions for Staff Assignment**:
        o Time for Assignment > **Reporting Year**.
        o LEA Information for Assignment > **LEA Number***.
        o School Information for Assignments > **School Number.**
        o School Information for Assignments > **School Name.**
    - From **Facts**
        o Staff Assignments > **# Of Assignments**.

    b. Add the following **Filters**:
    - **Reporting Year** is equal to/is in **2017-2018.**
    - **LEA Number** is equal to/is in **920.**
    - **School Number** is equal to/is in **000.** (000 is the Central Office school number)

    c. Click **Save**. (🖫). Name the report: *Demonstrate Filter From Another Analysis - Staff Count 17-18*.

    d. Click the **Results** tab to view the report.

2. From the Results tab, click **Save As** (🖫). Name the new report *Demonstrate Filter From Another Analysis - Staff UID.*

3. From Common Dimensions > Most Recent Staff Information, click **Staff ID**.

4. Click **Save As** (🖫). Name the third report *Demonstrate Filter From Another Analysis - Returning Staff Count 18-19*

5. Click the **Criteria** tab.

6. Update the **Reporting Year Filter** to **2018-2019.**

For more detailed instructions, click the **Help** button [Help] or the **Help Question Mark** button ⓘ on any of the OBIEE web pages.

7. Add a `Filter` to `Staff ID`.

    a. From `Operator`, scroll to the bottom of the drop-down list, click `is based on results of another analysis`.

    b. From `Saved Analysis`, click `Browse`. Locate *Demonstrate Filter From Another Analysis - Staff UID,* click `OK`.

For more detailed instructions, click the **Help** button [Help] or the **Help Question Mark** button [?] on any of the OBIEE web pages.
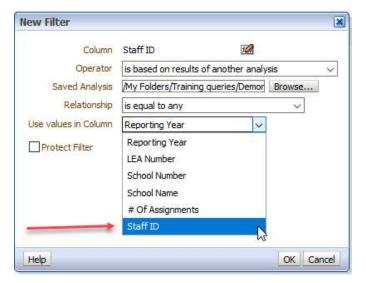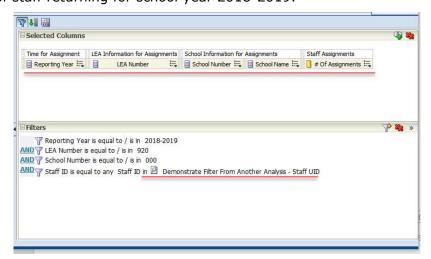
c. From `Use Values in Column`, click `Staff ID`. Click `OK`.

> Staff ID is the element in the saved report that will be used to compare to the Staff ID filter.

8. From the `Selected Columns` workspace, `Delete` the `Staff ID` element.

The filter for Staff ID remains. When results are run, the report will display the count of staff returning for school year 2018-2019.
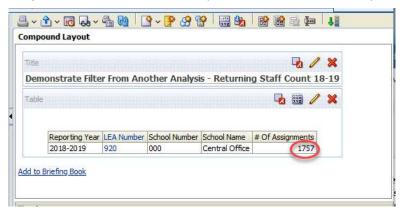
9. Click **Save**. (⬛). Click the **Results** tab to view the report.

The # Of Assignments value has been updated to reflect school year 2018-2019.

Combining Two or More Reports

This demonstration builds upon the Staff Assignment report: *Demonstrate Filter From Another Analysis - Staff Count 17-18* created in the *Adding a Filter from a Saved Report* section.
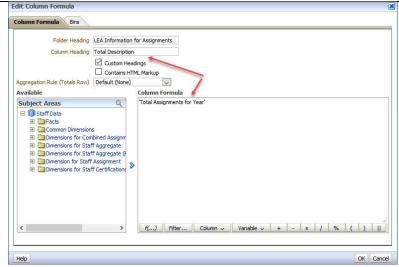
Creating the First Report

1. Copy the *Demonstrate Filter From Another Analysis - Staff Count 17-18* and save the copy as *Demonstrate Combining Two or More Reports into One Report – Staff*.

For instructions review the Saving and Downloading Reports section.

2. From the **Staff Data Subject Area**, add the **LEA Name** element.

(Dimension for Staff Assignment > LEA Information for Assignments)

Note: In this step, any element can be added to the report. Subsequent steps will modify the element to create the desired column.
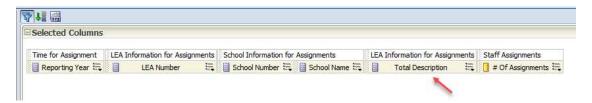
a. Hover over the Options (down arrow icon). Click **Edit Formula**.

b. Update the **Column Heading** field to *Total Description.*

c. In the **Column Formula** workspace, replace the contents with '*Total Assignment for Year'*

d. Click **OK**.

3. Position the **Total Description** element between **School Name** and **# Of Assignments** elements.

Important: When combining two or more reports into one report, placement of each element/column is critical.

4. Click **Save**. (🖫). Click the **Results** tab to view the report.
5. For consistency, position the **Total Description** element between **School Name** and **# Of Assignments**.
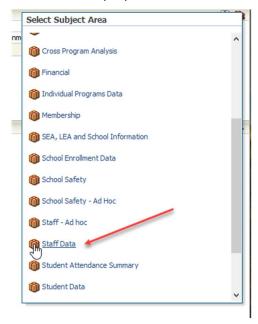
Joining Reports

1. Click the **Criteria** tab.
2. From the right side of the **Selected Columns** workspace, click the green plus sign (⊕).

For more detailed instructions, click the **Help** button [Help] or the **Help Question Mark** button ⑦ on any of the OBIEE web pages.
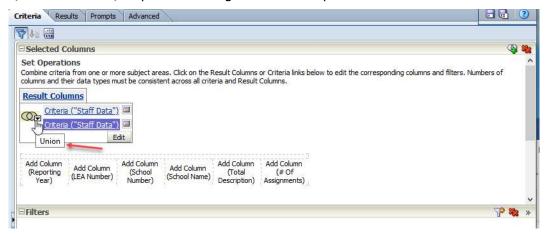
3. The `Select Subject Area` list is displayed. Click `Staff Data`.
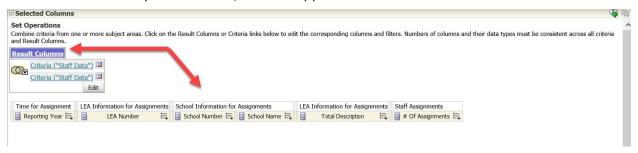
The `Selected Columns` workspace has changed to display the `union` of two `Criteria` (**"Staff Data"**) reports that together make up the `Result Columns`.
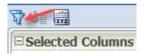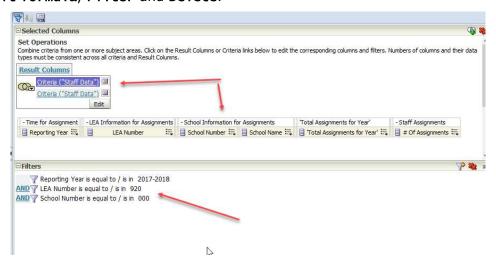
The column headings are identical to the original staff report; however, columns associated with the **Result Columns** have fewer options. The column options are limited to **Sort**, **Column Properties** and **Delete**. These are options that handle report formatting and display, not the report contents. Filtering and editing, which handle the report contents, are not applicable to the **Result Columns**.

Click the first **Criteria ("Staff Data")**, above the **Selected Columns** workspace click the **Show/Hide Filters Pane** icon.

The filters that were defined for the original staff report are associated with the first report in the multi-report report. The **Show/Hide Filters Pane** icon is a toggle. Click it and the filters are either displayed or hidden in/from the **Filter** workspace. The options for columns associated with the reports below the **Result Columns** are **Edit formula**, **Filter** and **Delete**.

For more detailed instructions, click the **Help** button [Help] or the **Help Question Mark** button [?] on any of the OBIEE web pages.
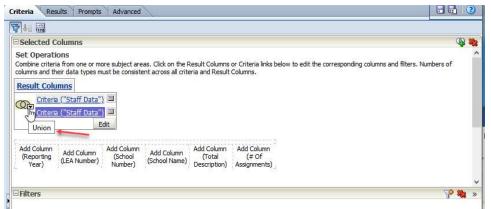
Creating the Second Report

In this demonstration, the second report will use the filter created in the *Adding a Filter from a Saved Report section*.

1. Below the **Result Columns**, click **Criteria ("Staff Data")**.

    The column placeholders are outlined with dotted lines. As columns are selected from the staff subject areas they will be dropped into the placeholders.

2. Add and **Filter** the columns to the second report in the order listed in the workspace.

    a. Dimension for Staff Assignment > Time for Assignment > **Reporting Year**

    b. Dimension for Staff Assignment > LEA Information for Assignment > **LEA Number**

    c. Dimension for Staff Assignment > School Information for Assignment > **School Number**

    d. Dimension for Staff Assignment > School Information for Assignment > **School Name**

    e. Dimension for Staff Assignment > LEA Information for Assignment > **LEA Number**

    This is element will be Edited in the next step.

    f. Facts > Staff Assignments > **# Of Assignments**

    Important: Use the elements from the Dimension for Staff Assignment -- Be sure to select the **Staff ID** from the **Most Recent Staff Information** in the Common Dimensions folder. If *Staff ID* is selected from Point In Time Staff Information the results will be off.
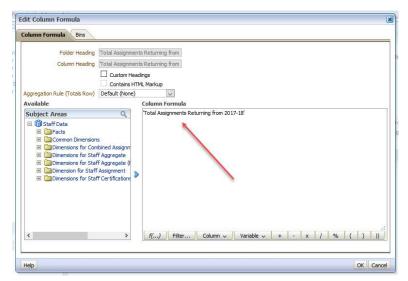
4. **Edit** the 2nd **LEA Name** column.

    a. Hover over the Options (down arrow icon). Click **Edit Formula**.

    b. In the **Column Formula** workspace, replace the contents with '*Total Assignments Returning from 2017-18'*.

c. Click **OK**.

5. Above the Selected Columns workspace, click the **Show/Hide Filters Pane** icon. Add the following Filters:

   a. **Reporting Year** is equal to/is in **2017-2018.**

   b. **LEA Number** is equal to/is in **920.**

   c. **School Number** is equal to/is in **000.**(000 is the Central Office school number)

6. Below the Selected Columns workspace, click the **Filter** icon (🔽).

   The elements already selected for the report appear.

   a. Click **More Columns**.

   b. Navigate to **Staff ID**.
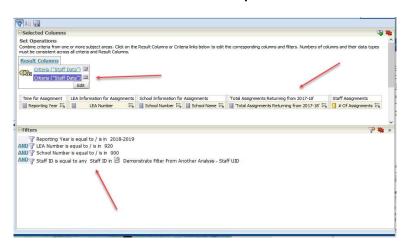
   (Common Dimensions > Most Recent Staff Information)

7. From the **New Filter** dialog box:

   a. From **Operator**, scroll to the bottom of the drop-down list, click **is based on results of another analysis**.

   b. From **Saved Analysis**, click **Browse**. Locate *Demonstrate Filter From Another Analysis - Staff UID,* click **OK**.

   c. From **Use Values in Column**, click **Staff ID**. Click **OK**.
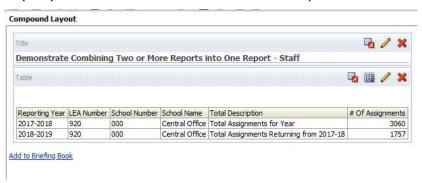
      Staff ID is the element in the saved report that will be used to compare to the Staff ID filter.

The set of filters for the second report should look like:

8. Click **Save** (🖫). Click the **Results** tab to view the report.

Compound Layout

Title

Demonstrate Combining Two or More Reports into One Report - Staff

Table

Reporting Year	LEA Number	School Number	School Name	Total Description	# Of Assignments
2017-2018	920	000	Central Office	Total Assignments for Year	3060
2018-2019	920	000	Central Office	Total Assignments Returning from 2017-18	1757

Add to Briefing Book
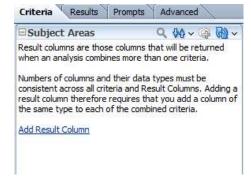
Important: When combining multiple reports into one report, it is critical that the **Criteria** base reports contain the same number of columns as the **Result** Columns. Columns can be added by adding a column to the Result Columns or adding a column to one of the base reports.

It is also critical that the data types match starting with the Result Columns and ending with the last base report. OBIEE says it best.

Criteria | Results | Prompts | Advanced

Subject Areas

Result columns are those columns that will be returned when an analysis combines more than one criteria.

Numbers of columns and their data types must be consistent across all criteria and Result Columns. Adding a result column therefore requires that you add a column of the same type to each of the combined criteria.

Add Result Column

Inline Prompts

An `inline prompt` is an initial `prompt`, meaning that it only displays when the report is rendered. After the user selects the `prompt` value, the `prompt` fields disappear from the analysis and the only way for the user to select different `prompt` values is to re-run the report.

Creating a New Analysis
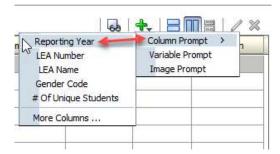
1. From the `Menu` bar, click `New`. Click `Analysis`. Select the `Student Data` Subject Area.
2. From `Common Dimensions`, select the following elements:
   - Time > `Reporting Year`
   - LEA Information > `LEA Number`
   - LEA Information > `LEA Name`
3. From `Facts >` Most Recent Student Information Per LEA, select the following elements:
   - `# of Unique Number of Students`
   - `Gender Description`
4. From the `Filters` workspace below the Selected Columns workspace, create a filter for `Charter Status` is equal to/is in `No`.

   (Common Dimensions > LEA Information)

5. `Save` the report as *Demonstrate Inline Prompts - Using Student Gender by Year.*
6. Click the `Results` tab to view the report.

Adding an Inline Prompt
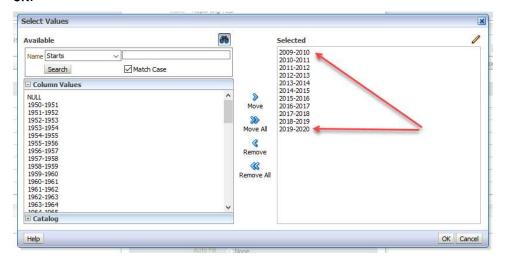
1. Click the `Prompts` tab.
2. Form the right of the `Definition` workspace, click the `Add` icon ( ).
3. Hover over `Column Prompt`, click `Reporting Year`.
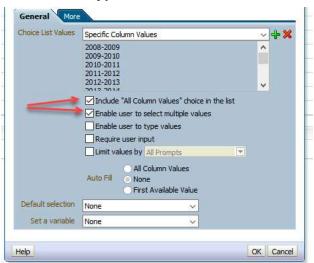
   a. The `New Prompt` appears. Click `Options.`

   b. Click the `Choice List Values` drop-down. Click `Specific Columns Values`.

   c. To the right of the `Choice List Values` drop-down, click the `Add` icon ( ).

For more detailed instructions, click the **Help** button [Help] or the **Help Question Mark** button on any of the OBIEE web pages.

d. The `Select Values` dialog box appears. Verity Column Values is expanded. `Move` reporting years `2009-2010 and forward` create a list in Selected Values. Click `OK`.
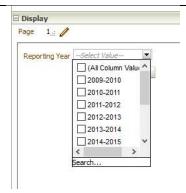
e. Below `Choice List Values`, check `Include "All Column Values" in the choice in the list` and `Enable user to select multiple values`.

f. Uncheck `Enable user to type values`. Click `OK`.

Note: A best practice is to test the Prompt from the `Display` workspace.
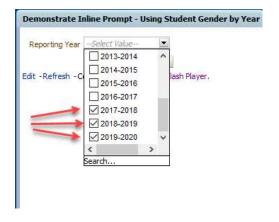
4. Click **Save** (🖫).
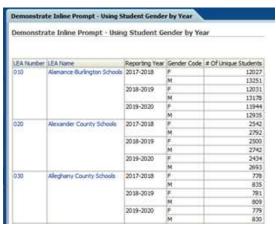
Using the Prompt in a Report

Click **Catalog** from the Main Menu Bar and navigate to the report. Click **Open.**

5. Click the **Reporting Year** drop-down. Check the appropriate reporting year(s).

    In this example, three schools years are checked: 2017-2018, 2018-2019, and 2019-2020.

6. Click away from the list. Click **OK**.

7. Adjust columns, as necessary.

8. Repeat **steps 1– 7** to view the report with new reporting year selections.

For more detailed instructions, click the **Help** button ⬚Help⬚ or the **Help Question Mark** button ⓘ on any of the OBIEE web pages.

Glossary of Terms

OBIEE Terms

Aggregate	A sum or assemblage of many separate units; sum total. In relation to CEDARS data, all Aggregate information is masked.
Analysis	Analysis lets you explore and interact with information by visually presenting data in tables, graphs, pivot tables, and so on. You can save, organize, and share the results of analyses.
Catalog	Where users create, access, and manage objects, and perform specific object-based tasks (for example, export, print, and edit). The catalog is organized into folders that are either shared or personal.
CEDARS Registration System	Application to request access to the CEDARS Reporting System. Everyone must register for the system prior to being granted access.
Collection	A capture of data that is submitted in response to an agency requirement for data.
Compound Layout	Where Views are displayed.
Dashboard	Dashboards provide personalized views of information. A dashboard consists of one or more pages. For the purposes of the CDW, all dashboards that are visible in the system to all users are published at the NC DPI level. Program area, business areas and LEAs may request specific dashboards.
Detail	The ability to drill down to the level of information that can be used to distinguish or trace an individual's identity such as name, social security number, date and place of birth, mother's maiden name, biometric records, and any other personal information that is linked or linkable to an individual.
Dimension	Dimensions define the ways in which the facts can be analyzed.
Fact	A Fact table is a table with measures. Examples of measures include Average student GPA or Number of students in the Student Fact table.

For more detailed instructions, click the **Help** button [Help] or the **Help Question Mark** button [?] on any of the OBIEE web pages.

Filter	Filters within an Analysis allows the user to limit the data returned from a column. Multiple Filters may be applied to an Analysis. When a Filter is created it is hard coded into a report.
Layout Pane	Used to specify the layout of data in data views (graphs, gauges, funnel graphs, pivot tables, and tables).
More Options	This icon is specific to a column. Functions in the More Options change from screen to screen.
NCID	Credentials (Username and Password) that allow access to CEDARS applications.
OBIEE	Oracle Business Intelligence Enterprise Edition. This system is the user interface to access the CDW.
Point-in-Time	A static view of data representing a period of time.
Program/User Group	DPI, LEA or School level
Prompt	Prompts provide the ability to apply dynamic filters for a particular report. Multiple Prompts may be applied to an Analysis.
Selection Pane	Allows the user to select items from the Subject Area or the Catalog to work with.
Subject Area	A Subject Area is a logical collection of Facts and Dimensions presented to the user to create and modify reports. The CEDARS Reporting System Subject Areas may not be joined.
User Role	Type of security granted to a user. Users may have one or more User Roles in CEDARS
Views	A variety of views can be added to Analyses, such as graphs and pivot tables that may allow the user to drill down to more detailed information.
Workspace	Allows the user to manipulate the columns selected from the Selection Pane.

For more detailed instructions, click the **Help** button [Help] or the **Help Question Mark** button [?] on any of the OBIEE web pages.